Amendments to the Drawings:

The eight attached sheets of drawings (attached as an Appendix to the Amendment) include changes to Figures 1-5 and 10-12, respectively. The figures have been adjusted to ensure that all drawings are properly and individually captioned and to ensure that those figures depicting embodiments of prior art present a proper identifying legend to that effect. These replacement figures find support throughout the original specification as filed and do not constitute new matter.

Attachments: Eight (8) Replacement Drawing Sheets for FIGURES 1-5 and 10-12, respectively
Eight (8) Annotated Sheets Showing Changes

REMARKS/ARGUMENTS

Claims 1-16 are pending in this application. Claims 1-7 and 9-15 are rejected by the Examiner. Claims 8 and 16 are objected to. Claims 1 and 9 have been amended to render in a more precise and clear manner that which Applicants deem to be the inventive subject matter of the application. The present amendments to the claims find support throughout the original specification as filed. For example, support for the proposition that the continuous wire members of the structures of the invention possess a helical curvature (rather than a perfectly straight alignment), may be found, *e.g.*, in Figures 6, 7, 8, 9, 10, 11 and 12 of the application, as well as at page 13, lines 16-20 of the application as filed and published. As such, no new matter has been added by this amendment.

Applicants have herewith also submitted replacement formal drawing sheets for Figures 1-5 and 10-12 of the application to ensure that all drawings are properly and individually captioned and to ensure that drawings presenting prior art are properly identified as such.

Applicants also reiterate appreciation for the Examiner's prior determination that claims 8 and 16 present subject matter that would be allowable if appropriately rewritten.

Claim Rejections under 35 U.S.C. §112, first paragraph (written description requirement)

Claims 1 and 9 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement for the reasons set forth at page 2 of the Office Action.

Applicants respectfully note that claims 1 and 9 have been amended to render explicit and to clarify that the continuous wire members of the disclosed structures possess a helical shape (rather than a simple straight-line form), as is demonstrated, *e.g.*, in Figures 6-12 of the original application as filed. (*See also, e.g.*, page 13, lines 18-20 of the specification.) One of average skill in the art would recognize that it is the tension of the intercrossing of these helical wires at the intersection points that allows the light structure to be self-stabilized without need for bonding (or welding, etc.) at any intersection points and prevents the self-supporting wire structure from collapsing. As such, Applicants believe that the claims as currently recited are

adequately supported by the specification and figures as originally filed to demonstrate that Applicants were in full possession of the invention as is presently claimed at the time of filing. Thus, Applicants respectfully ask that the Examiner reconsider and withdraw the rejections to claims 1 and 9 as presently recited under 35 U.S.C. § 112, first paragraph.

Claim Rejections under 35 U.S.C. § 103(a) over Snelson in view of Barlow

Claims 1-6, 8 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Snelson (6,739,937) in view of Barlow (4,271,628) for the reasons set forth in pp. 3-6 of the Office Action.

In response, Applicants note that claims 1 and 9 have been amended to clarify and render more precisely that which Applicants deem to be the inventive subject matter of the present disclosure. Specifically, the present invention features *continuous wire members of a helical curved shape* (as opposed to the straight "rod" wire members of the prior art) and these intersecting helical wire members inherently and consequently enhance the self-stabilizing properties of the structure to allow a user to omit the use, complexity, expense and limitations of "joining members," "spherical connector members" or other means of fixing or bonding the structural rod members of the invention together. Furthermore, this omission can be achieved without substantially sacrificing the strength, stability and integrity of the overall structure.

Applicants again respectfully point out that the cited Snelson and Barlow art relate to three-dimensional toy construction kits, comprising (in Snelson) a plurality of elongated rod members of *different lengths* and *a plurality of joining members* to bond the rod members together, or comprising (in Barlow) a plurality of connecting member "spokes" linked to and radiating out from a substantially spherical connector member "hub." In Barlow, the spherical connector body "hub," which serves as a structural focal node and serves to link the flexible rod members of the structure together, is the most indispensable and critical facet of the invention. That is, Barlow never and in no way contemplates the construction of structures without hubs to "bond" the flexible rod members of the structure together. While the Barlow structural members

possess the advantage of being flexible in order to accommodate a multiplicity of possible shapes and structures, this also results in a corresponding lack of structural strength and stability, such that the Barlow structures will not maintain their shape without the presence of connector "hub" members to place and bind the rod members in their proper orientations. Similarly, in Snelson, the required inclusion of joining members to hold the structure together is due to the fact that the three-dimensional structures of that disclosure, unlike that of Applicants, are not made for the particular purposes of obtaining superior mechanical strength and stability. Consequently, the Snelson claims do not contemplate structures that lack joining members or otherwise are completely free from having members being joined or bonded together. Even as certain *interior* modules of particular Snelson structures *might* feature suitably ample and sufficient internal tension such that "joining members are not required"; nevertheless, according to Snelson (at [0036], last sentence; col. 5, lines 29-31) "the outermost ones [Snelson vertexes] *typically will require connection using joining members*." (emphasis added).

There is no disclosure nor any suggestion or motivation provided by Snelson or Barlow that repetitive mass-production is possible if the three-dimensional cellular structure is woven with continuous helical wires, further wherein the additional step of applying external bonding at the intersection points (to maintain structural strength and integrity) between wires can be omitted, nor is this present invention a mere obvious variation upon the teachings provided by Snelson and/or Barlow. Rather, the present structures, and the advantages thereof, only become apparent and readily put into practice by those of average skill in the art upon encountering the teachings of the present disclosure. It is clear, when considering the structures, resulting improvements in structural strength, and the central objectives of the current invention as compared to those of Snelson and Barlow, that Applicants offer a novel and non-obvious improvement upon the prior art. Applicants thus respectfully request that the Examiner reconsider and withdraw the present rejection under 35 U.S.C. § 103(a) and deem claims 1-6, 8 and 16 to be in suitable condition for allowance.

Claim Rejection under 35 U.S.C. § 103(a) over Snelson in view of Barlow and in further view of Constantinesco

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Snelson (6,739,937) in view of Barlow (4,271,628) and in further view of Constantinesco (2,677,955) for the reasons set forth in pp. 6-7 of the Office Action.

The Examiner alleges that those skilled in the art could easily carry out the invention of claim 7 relating to manufacturing a reinforced, solid cellular light structure through a combination of the teachings of Snelson, Barlow and Constantinesco. In response, Applicants observe that independent claim 1, which claim 7 is dependent to, has been presently amended with this response so that the present invention provides elements and features that are not present in these prior art disclosures, nor are the innovations offered by the present invention an obvious variation over the prior art. Specifically, as detailed above, the present disclosure features *continuous wire members of a helical shape* which intrinsically enhance the self-stabilizing properties of the structure and allow the user to omit the use, complexity, expense and limitations of "joining members," "spherical connector members" or other means of fixing or bonding the structural rod members of the invention together without substantially sacrificing the strength, stability and integrity of the overall structure. Constantinesco does not address or solve this problem. Rather, the teachings of Constantinesco suggest a way of increasing the internal tensile strength and resistance of a product or structure to rupture, but Constantinesco does not teach or suggest that the structural members need not be fixed or bonded together. Furthermore, Applicants reiterate that as Constantinesco teaches a means of fixing or bonding a structure throughout a structure's volume, Constantinesco also at least implicitly reinforces the notion that structures of the prior art -- as they lack the self-stabilizing characteristics of the intersecting helical wire structures of the present invention -- will require some form of bonding or reinforcement between support members as a way to maintain the strength, stability and integrity of the overall structure.

In contrast, the present invention is able to omit such bonding between structural support members without significantly sacrificing internal strength and stability and is consequently more adaptable to the filling-in of internal empty spaces of the structure for purposes other than that of reinforcing structural integrity, *e.g.*, for waterproofing, acoustics, privacy, or myriad other purposes. As these prior art references thus fail to provide the critical innovative structures of the present invention as a starting point, one of ordinary skill in the art would still lack the teaching, suggestion or motivation to come up with the particular structures and advantageous features described in claim 7, even in view of Snelson, Barlow, and Constantinesco whether considered alone, or considered in combination. Applicants again ask the Examiner to reconsider and withdraw to rejections under 35 U.S.C. § 103 to claim 7.

Claim Rejections under 35 U.S.C. § 103(a) over Snelson in view of Barlow in further view of Constantinesco

Claims 9-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Snelson in view of Barlow in further view of Constantinesco for the reasons set forth on page 7 of the Office Action.

The Examiner alleges that the methods of claims 9-15 are an obvious method of using the device(s) of rejected claims 1-7. In response, Applicants observe that claim 9 is presently amended to further explicate and clarify the innovations offered by the present disclosure over the teachings of the prior art. With entry of the present amendment, one of average skill in the art would lack the motivation or suggestion to apply the methods of Constantinesco to the teachings of Snelson and Barlow to result in the present invention as currently recited. Any belief that the prior art teachings render the present invention obvious is likely due to hindsight bias rather than upon any actual or implied teachings presented by a combination of the cited references, even when considered in view of the then-contemporary state of the art.

Applicants reiterate that as Snelson and Barlow emphasize an importance to bonding by joining or connecting structural rod members at intersections to enhance strength and structural stability, a practitioner of average skill in the art would not have the suggestion or motivation to

pursue the continuous helical wire structures of the present invention and the methods of present invention, particularly *without the use of bonding between the wire members*, nor would such a practitioner consider such a method or any of the present methods obvious or reasonably expect success in pursuing such methods, even when viewed in combination with the teachings of Constantinesco. Instead, it is only with the present disclosure that one of average skill in the art would recognize and understand the value of using the present methods and of producing the presently-disclosed structures and readily be able to put the invention into practice.

The Examiner is thus respectfully requested to reconsider and withdraw the rejection of claims 9-15 under 35 U.S.C. § 103 over Snelson and Barlow in view of Constantinesco.

Summary

Entry of this Amendment, including replacement formal drawings for Figures 1-5 and 10-12, into the file of the application is respectfully requested. The remarks presented above are believed to be sufficient to overcome all of the objections and rejections to the claims of the present application. The Examiner is, therefore, respectfully requested to reconsider and withdraw the subject rejections and to pass the application through to an allowance.

If the Examiner does not agree, however, but believes that an interview would advance the progress of this case, the Examiner is respectfully invited to telephone Applicants' representative at the number below so that an interview may be scheduled.

THIS CORRESPONDENCE IS BEING SUBMITTED ELECTRONICALLY THROUGH THE PATENT AND TRADEMARK OFFICE EFS FILING SYSTEM ON May 17, 2010.

RCF/AGG:mw

Respectfully submitted,

Robert C. Faber
Registration No.: 24,322
OSTROLENK FABER LLP
1180 Avenue of the Americas
New York, New York 10036-8403
Telephone: (212) 382-0700